

BUR9-2003-0046-US1

**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT APPLICATION**

In Re: Kern et al.  
Serial No.: 10/709,315  
Filed: April 28, 2004  
Title: **STOP MOTION IMAGING  
DETECTION SYSTEM AND METHOD**

Atty. Docket: BUR9-2003-0046-US1

Today's Date: April 28, 2004

Group Art Unit: (not assigned)

Examiner: (not assigned)

Fax: 703-872-9306

**RECEIVED  
CENTRAL FAX CENTER****APR 28 2004****OFFICIAL****PETITION PURSUANT TO 37 C.F.R. § 1.47(a)**

Commissioner for Patents  
Alexandria, VA 22313-1450

Sir:

This petition is being filed pursuant to 37 C.F.R. 1.47(a) involving a filing where one of the inventors refuses to join other inventors in an application for patent. Mr. Paul A. Manfredi has refused to join in the above-identified application after diligent efforts were made to have Mr. Manfredi execute the declaration and assignment documents.

At the time of invention, Mr. Manfredi was an employee of International Business Machines Corporation (IBM). A copy of the disclosure document (see Exhibit A) created by Mr. Manfredi on January 17, 2003 shows that Mr. Manfredi was an IBM employee at the time of invention and disclosed the invention to IBM. Mr. Manfredi is obligated under his employment agreement with IBM to assign his rights to the invention and to cooperate with IBM in the execution of the documents relating to the acquisition of patent rights.

The facts relating to this refusal are set forth as follows.

Based on my conversations with Carol Mueller, my office assistant, Ms. Mueller

indicated to me that she made multiple telephone calls and left telephone messages for Mr. Manfredi at his home requesting his cooperation in the review of attorney docket number BUR9-2003-0046-US1. Ms. Mueller told me that she received no response to her telephone messages from Mr. Manfredi. On November 21, 2003 and November 26, 2003, I left telephone messages for Mr. Manfredi at his home requesting his cooperation in the review of attorney docket number BUR9-2003-0046-US1. I received no response to my telephone messages from Mr. Manfredi. The application papers including a cover letter (see Exhibit B), a copy of the patent application including drawings, and the declaration and assignment documents were U.S. Postal Service (USPS) Express Mailed to Mr. Manfredi's home address and were received on December 12, 2003 as indicated by the USPS Receipt (see Exhibit C). It was requested in the cover letter that the application papers be returned to my office by December 23, 2003.

As stated herein above, at the time of invention, Mr. Manfredi was an employee of IBM. A copy of Mr. Manfredi's employment agreement is provided in Exhibit D. As stated in Mr. Manfredi's employment agreement, he is obligated to assign his rights to the invention and to cooperate with IBM in the execution of the documents relating to the acquisition of patent rights. Pertinent sections of Mr. Manfredi's employment agreement are shown below:

- "4. I hereby assign to IBM my entire right, title and interest in any invention or idea, patentable or not, hereafter made or conceived solely or jointly by me: ..." , and
- "5. b. I will, on his [IBM Patent Operations Manager] request, promptly execute a specific assignment of title to IBM, and do anything else reasonably necessary to enable IBM to secure a patent therefor in the United States and in foreign countries."

As stated in the cover letter (see Exhibit B), IBM made a reasonable offer of \$500 to more than compensate Mr. Manfredi for his time and effort to review and sign the application papers. Mr. Manfredi's response to IBM's request was an email to me on December 23, 2003 in

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which Mr. Manfredi requested financial compensation in the amount of \$10,000 in return for reading and signing the application papers (see Exhibit E). In another email to me on March 17, 2004 (see Exhibit F: last paragraph), Mr. Manfredi increased the amount of his requested financial compensation to \$15,000.

IBM believes that it made more than a reasonable offer of compensation for a reasonable amount of work that would have been required of Mr. Manfredi to fulfill his obligations under his employment agreement. The fact that Mr. Manfredi requested a significantly higher amount of compensation and then increased the amount he was requesting in return for his cooperation indicated to me that Mr. Manfredi was not willing to cooperate with IBM as per the terms of his employment agreement.

The last known address of Mr. Manfredi is the following:

382 Twin Peaks Road  
Waterbury Center, VT 05677

Therefore, Applicants respectfully request that this petition be granted and the above-identified application be accepted as complete.

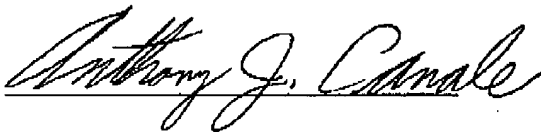
Please charge the petition fee of \$130 to Applicants' Deposit Account, 09-0456.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully Submitted,

For: Kern et al.,

By: 

Anthony J. Canale  
Registration No. 51,526  
Agent for Applicants  
Phone: (802) 769-8782  
Fax: (802) 769-8938  
Email: [acanale@us.ibm.com](mailto:acanale@us.ibm.com)

IBM Corporation  
Intellectual Property Law - Zip 972E  
1000 River Street  
Essex Junction, Vermont 05452

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**EXHIBIT A**

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**Disclosure BUR8-2003-0023**

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By Paul Manfredi On 01/17/2003 10:56:54 AM MST

Last Modified By Maura Mulligan On 10/09/2003 05:18:22 PM EDT

Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

\*Title of disclosure (in English)

Stop Motion Imaging Detection System

**Summary**

|                              |  |
|------------------------------|--|
| Status                       | Final Decision (File)  |
| Final deadline               |  |
| Final deadline reason        |  |
| Docket family                | BUR8-2003-0046   |
| * Processing location        | Burlington   |
| * Functional area            | (Burlington - MD) All inventors located in Burlington  |
| Attorney/Patent professional | Anthony Canale/Burlington/IBM  |
| IDT team                     | William Motsiff/Burlington/IBM<br>Matt Rutter/Burlington/IBM<br>Tony Stamper/Burlington/IBM<br>Tom McDevitt/Burlington/IBM<br>Henry Trombley/Burlington/IBM<br>Jeffrey Gambino/Fishkill/IBM<br>Erick Walton/Burlington/IBM<br>Nancy Flock/Burlington/Contr/IBM |
| Submitted date               | 01/23/2003 12:26:13 PM MST   |
| * Owning division            | MD   |
| Incentive program            |  |
| Lab                          | Slattery   |
| * Technology code            | 10122  |
| PVT score                    | 23   |

**Inventors with a Blue Pages entry**

Inventors: Paul Manfredi/Burlington/IBM, Frederick Kern/Burlington/IBM, Douglas Nadeau/Burlington/IBM

| Inventor Name         | Inventor Serial | Div/Dept | Inventor Phone | Manager Name        |
|-----------------------|-----------------|----------|----------------|---------------------|
| > Manfredi, Paul A.   | 060262          | 29/AYUV  | 446-1126       | Pakulski, Steven F. |
| Kern Jr, Frederick W. | 597857          | 29/AYUV  | 446-9976       | Pakulski, Steven F. |
| Nadeau, Douglas P.    | 469941          | 29/GP8V  | 446-2931       | Miller, Linda A.    |

&gt; denotes primary contact

**Inventors without a Blue Pages entry****IDT Selection****Main Idea**To view the main idea for this disclosure, click on this doclink --> ☐ (if you are prompted to enter a server name,

Main Idea for Disclosure BUR8-2003-0023 - continued

**Main Idea for Disclosure BUR8-2003-0023**

Prepared for and/or by an IBM Attorney - IBM Confidential

Archived On 06/07/2003 01:22:49 AM

Title of disclosure (in English)

Stop Motion Imaging Detection System

**Main Idea**

1. Background: What is the problem solved by your invention? Describe known solutions to this problem (if any). What are the drawbacks of such known solutions, or why is an additional solution required? Cite any relevant technical documents or references.

Image analysis is a useful tool in the evaluation of equipment performance or in real time process control. It has not been applied to systems in motion as it is difficult to obtain images that depict the objects as stationary objects and within the same orientation. The ability to image and analyze product during a particular procedure can only enhance our manufacturing capabilities.

2. Summary of Invention: Briefly describe the core idea of your invention (saving the details for questions #3 below). Describe the advantage(s) of using your invention instead of the known solutions described above.

Our idea is to use a photostrobe to illuminate an object that is synchronized to the periodicity of motion and to feed the series of images created to a video display system with a refresh rate equal to the periodicity of the moving object. Thus an apparently stationary image will be displayed & available for analysis.

3. Description: Describe how your invention works, and how it could be implemented, using text, diagrams and flow charts as appropriate.

By utilizing a photo strobe the ability to stop motion, an image of the surface can be obtained. This image can then be cataloged for display or analysis. For example, proper polishing of a CMP wafer is easily judged visually, but impossible to observe in real time due to wafer movement. Our invention would solve this problem by creating a stop motion image that could be viewed or analyzed to determine the progress of the polishing process as a function of time. The process could be viewed/analyzed to provide real-time process control. For example, pad pressure and/or rotational speed could be adjusted in real time to minimize a center top edge variations in polishing rate. This technique could also be applied to other processes such as the coating of wafers with photoresist. Where resist flow could be halted when a uniform coating is detected across the wafers surface.

**EXHIBIT B**

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**International Business Machines Corporation**

Microelectronics Division  
Intellectual Property Law  
Mail 972E  
1000 River Street  
Essex Junction, VT 05452  
Phone - 802 769-8782  
Fax - 802 769-8938  
E-mail - [acanale@us.ibm.com](mailto:acanale@us.ibm.com)

December 8, 2003

Mr. Paul Manfredi  
382 Twin Peaks Road  
Waterbury Center, VT 05677

Re: BUR920030046US1

Dear Mr. Manfredi:

Please find enclosed patent application BUR920030046US1 and associated formal papers. I am requesting that you review the patent application and sign the associated formal papers. As stated in my telephone messages to you on November 21, 2003 and November 26, 2003, should you sign the formal papers, the application will be filed with the United States Patent Office and you will receive an IBM Patent Award in the amount of \$500.00 for the filing of the application. The award will be processed by your former manager, Steven Pakulski. If you do not sign the formal papers, the application will be filed without your signature and you will not receive any financial award related to the filing of this application.

Should you sign the formal papers, we would require that they be returned to our office in the enclosed, pre-paid return envelope by Tuesday, December 23, 2003.

Sincerely,

Anthony J. Canale  
Patent Agent

**EXHIBIT C**

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| SENDER: COMPLETE THIS SECTION  | COMPLETE THIS SECTION ON DELIVERY   |
|--|---|
| <ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul> | <p>A. Signature <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____</p> <p>C. Date of Delivery <i>12/12/03</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes<br/>If YES, enter delivery address below: <input type="checkbox"/> No<br/><b>DEC 15 2003</b></p> <p>3. Service Type<br/><input type="checkbox"/> Certified Mail <input checked="" type="checkbox"/> Express Mail<br/><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise<br/><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p> |
| 1. Article Addressed to:<br><i>Mr. Paul Manfrete<br/>382 Twin Peaks Rd.<br/>Waterbury Center,<br/>VT 05677</i>   |   |
| 2. Article Number <i>EV 024700912 US</i><br>(Transfer from service label)  |   |
| PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1035   |   |

**EXHIBIT D**

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## Employee Confidential Information and Invention Agreement

(To be signed by all employees on the first day of employment)

In consideration of my employment by IBM:

1. I will not disclose to anyone outside of IBM, or use in other than IBM's business, any confidential information or material relating to the business of IBM or its subsidiaries, either during or after my IBM employment, except with IBM's written permission. I also understand that information and materials received in confidence from third parties by IBM and its subsidiaries is included within the meaning of this paragraph.
2. I will not disclose to IBM, or induce IBM to use, any confidential information or material belonging to others.
3. I will comply, and do all things necessary for IBM to comply, with United States Government regulations, and with provisions of contracts between the agencies of the United States Government or their contractors and IBM, which relate either to patent rights or to the safeguarding of information pertaining to the defense of the United States.
4. I hereby assign to IBM my entire right, title and interest in any invention or idea, patentable or not, hereafter made or conceived solely or jointly by me:
  - a. while working in IBM in an executive, managerial, planning, technical, research or engineering capacity (including development, manufacturing, systems, applied science, sales and customer engineering); and
  - b. which relates in any manner to the actual or anticipated business of IBM or its subsidiaries, or relates to its actual or anticipated research and development, or is suggested by or results from any task assigned to me or work performed by me for or on behalf of IBM;

except any invention or idea which I cannot assign to IBM because of a prior invention agreement with

\_\_\_\_\_ which is effective until

None (Give name and date or write "none").

5. I agree that in connection with any invention or idea covered by paragraph 4:
  - a. I will disclose it promptly to the local IBM Patent Operations Manager; and
  - b. I will, on his request, promptly execute a specific assignment of title to IBM, and do anything else reasonably necessary to enable IBM to secure a patent therefor in the United States and in foreign countries.
6. I represent that I have indicated on the back of this form any inventions or ideas, not covered by Paragraph 4, in which I have any right, title or interest, and which were previously conceived either wholly or in part by me, but neither published nor filed in the United States Patent Office, and identified all of these.

If you do not have any inventions or ideas to indicate, write "none" on this line: None.

(It is in your interest to establish that any such inventions or ideas were made before employment by IBM. You should not disclose such inventions or ideas in detail, but only identify them by the titles and dates of documents describing them. If you wish to interest IBM in such inventions and ideas, you may submit them to IBM in accordance with the provisions outlined in IBM's Form MOS-4472.)

7. I acknowledge receipt of a copy of this agreement, and agree that with respect to the subject matter hereof, it is my entire agreement with IBM, superseding any previous oral or written communications, representations, understandings, or agreements with IBM or any official or representative thereof.

Witness:

R. A. Lamin

Employee's Manager or other appropriate IBM representative

Signed:

Paul A. Manfredi

Employee's Full Name

Date:

11/16/73

Date:

Nov. 16, 1973

MOA-3087-2

Personnel Folder

(over)

(If you have entered "none" in Paragraph 6, do not fill in this section.)

The following are inventions or ideas, not covered by Paragraph 4, in which I have any right, title or interest, and which were previously conceived either wholly or in part by me, but neither published nor filed in the United States Patent Office:

Description of Documents: (If applicable)

| Title on Document | Date on Document | Name of Witness on Document |
|-------------------|------------------|-----------------------------|
| _____             | _____            | _____                       |
| _____             | _____            | _____                       |
| _____             | _____            | _____                       |
| _____             | _____            | _____                       |

Signed: \_\_\_\_\_  
Employee's Full Name

Date: \_\_\_\_\_

**EXHIBIT E**

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Paul Manfredi  
<myvip1@yahoo.com>

12/23/2003 10:22 AM  
This document expires on  
12/23/2005

To Anthony Canale/Burlington/IBM@IBMUS

cc

bcc

Subject Patent Review and applications.

Dear Mr.Canale:

As a former employee of IBM I am not obligated to review any of the patent applications I will however do so for the sum \$10,000.00 each. I am open to offers regardin my signiture.

If you have any question regarding this matter I can be reached at802-244-6933.

Paul A. Manfredi

Do you Yahoo!?

Protect your identity with Yahoo! Mail AddressGuard



**EXHIBIT F**

BUR9-2003-0046-US1



Paul Manfredi  
<myviperis1@yahoo.com>  
03/17/2004 01:27 PM

To Anthony Canale/Burlington/IBM@IBMUS  
cc

Subject Re: Patent Review and applications.

Anthony, attached are the tough business decisions IBM and My company face now and in the the foreseeable future.

**IBM's Position:**

As you know times are tough in the semiconductor industry. Although you have worked for many years for the promises made and you years of service have been greatly appreciated it is necessary for IBM to set a new standard of rules IBM does not take these steps lightly. However if we are going to survive in todays market place we need to make tough decisions

We as a company are now going to change the rules governing medical, retirement, and employment or whatever we need to do . The prior 20 years of service you have provided up until 1993 while accepting a lower salary the promise of a life long job as long as your performance is good and free medical coverage is no longer in effect. Regardless of your abilities, if you are caught up in a reorganization and the job requirements change we will need to let you go. If and when business needs dictate and additional manpower is needed , you will not be considered.

**My Company:**

For twenty years you work hard and provide your employer undivided attention. You come in whenever called for emergencies, work holidays and rotational shifts. You put the needs of your employer first. You do all this for the promised benefits. You plan your future years based on the circumstances presented by your employer. You trust that what Management has said to you at every appraisal will be honored. Management agrees that your salary is low however they point out the cost of benefits they provide for free and while other company's are laying off IBM maintains its full employment policy. You accept this and plan for your future years accordingly. Some twenty years later you are locked in trying to reach your goals for a decent retirement. During this twenty year phase you have never received an appraisal lower than a two in any of your career/job assignments. In total years of service you have received 23 two rating appraisals and six one appraisals. You are told you are valued for your performance and significant contributions to IBM. Your Suggestions, Ideas and patents contribute to leading edge technologies, generating huge manufacturing revenue. You do your best to provide IBM with IP

so they can be the leader in patent submissions within the industry. You are told you are a prolific inventor and your contributions to the company appreciated.

Twenty years later the future you have worked so hard to build gets pulled out from under you. Full employment becomes a thing of the past. To avoid getting let go you relocate to Vermont. You take on a new assignment in equipment engineering and become a leader in tooling and process development technology. Your free medical benefits are now costing you the price of a car payment and increase every year with no end in sight. You are offered a new cash balance plan for your retirement at a price that will only last you at most five years. Due to Federal law if you are over forty you can stay under the old plan however you will not receive any additional pension credit for the additional years of service past 1992. You still accept this. Now years later you get caught up in a reorganization and one month before you reach retirement eligibility you are let go. No offer is made to take on a new assignment within IBM, just "Do to ! business needs we are no longer needing your services". Three months after you are let go IBM starts hiring new employees to do the job you were doing without any consideration to past employees that had provided dedicated service.

I reach retirement through the "Bridge" and get hit with a 100% increase in medical cost over an active employees rate which had just increase 100% in 2004.

My company consists of my family members and as the CEO of this company I do not work for free. I was legally obligated to review and sign the three patent applications while employed by IBM. As of December 1, 2003 I was no longer a IBM employee. As you know times have changed just as they have for IBM. I am obligated to my stock holders. I am to provide the necessary funds to sustain and reasonable life style. Due to the needs of my business it is just as important that my stock holders are happy with my performance as CEO, this is the same as it is to IBM's stockholders.

During the final two months of employment, while I looked for a job in Vermont, IBM had the opportunity to close on any open issues regarding my IBM employment. During this time period I was obligated to perform reasonable duties and cooperate as necessary. As you know nothing was presented to me during this time period. As of November 17, 2003 I no longer received compensation from IBM and was considered no longer an employee. As of November 31, 2003 I was fully retired through the "Bridge". Any and all agreements made with IBM other than disclosing confidential material to others outside of IBM became null and void.

Due to business needs my company will require payment in the form of US currency for each of the patent reviews and assignment to IBM as you have been requesting. The charge for the technical review is \$ 2500.00 each. The charge for transferring the patent rights over to IBM is \$12,500.00 each. This offer is good for a period of thirty days from receipt.

If you have any questions regarding this matter I can be reached by calling at 802-244-6933.

Sincerely :

**Paul A. Manfredi**

**President ,CEO, and Treasure ot the Manfredi Family**